Abstract of cited Ref. 11

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-229834
(43)Date of publication of application : 22.08.2000

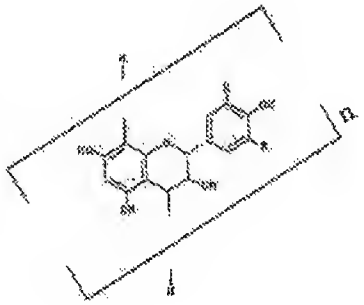
(51)Int.Cl. A61K 7/48
A61K 7/00
A61P 17/00
A61P 17/16
A61K 35/78
// A61K 7/06
A61K 7/075
A61K 7/50
C07D311/62

(21)Application number : 11-032480
(22)Date of filing : 10.02.1999

(71)Applicant : KANEBO LTD
HANAOKA SHUSUKE
(72)Inventor : HASUNUMA KYOTARO
HANAOKA SHUSUKE
MORITA KAZUYOSHI
YAMAGUCHI SAYURI

(54) COSMETIC

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain a cosmetic excellent in preventing effect from getting older, activating metabolism of hair roots on a scalp and having excellent effect improving growth of the hair roots.
SOLUTION: This cosmetic includes (A) a component originated in pine bark including proanthocyanidin of formula I (n is 1-1,000; R is H or OH) as a main component and preferably (B) diisopropylaminedichloroacetate. The component A is a substance extracted from pine bark of French beach pine growing in the Bordeaux area of France and Atlantic coast of Pyrenean mountains and its dosage is preferably 0.01-10 wt.% based on total weight of the objective cosmetic and the dosage of component B is preferably 0.01-10 wt.%.



(19)日本国特許庁（ＪＰ）　(12)公開特許公報（Ａ）　(11)特許出願公開番号
特開2000－229834
（P2000－229834A）
(43)公開日　平成12年８月22日(2000.8.22)

(51)Int.Cl.⁷	識別記号	ＦＩ		テーマコード（参考）
Ａ６１Ｋ　7/48		Ａ６１Ｋ　7/48		４Ｃ０６２
7/00		7/00	Ｋ	４Ｃ０８３
			Ｄ	４Ｃ０８８
			Ｊ	
			Ｃ	

審査請求　未請求　請求項の数２　ＯＬ　（全８頁）　最終頁に続く

(21)出願番号　特願平11－32480

(22)出願日　平成11年２月10日(1999.2.10)

(71)出願人　000000952
鐘紡株式会社
東京都墨田区墨田五丁目17番４号
(71)出願人　594175928
花岡　秀典
神奈川県平塚市花水台38番６号
(72)発明者　蓬沼　衛太郎
神奈川県南足柄市竹松62番地４
(72)発明者　花岡　秀典
神奈川県平塚市花水台38番６号
(72)発明者　森田　和良
神奈川県小田原市寿町５丁目３番28号　鐘紡株式会社化粧品研究所内

最終頁に続く

(54)【発明の名称】　化粧料

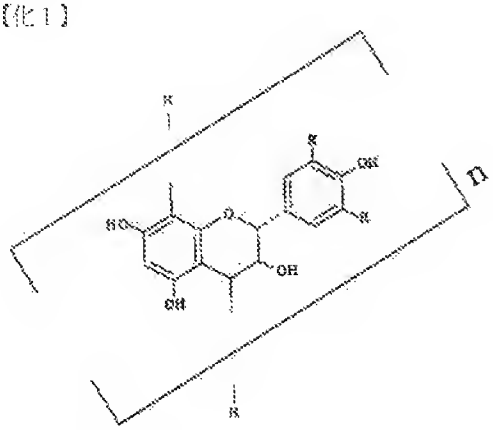
(57)【要約】
【課題】皮膚老化防止効果（活性酸素抑制効果、過酸化脂質抑制効果、荒れ肌改善効果、角質改善効果、ターンオーバー速度を速くする効果）に優れ、頭皮における毛根の代謝を賦活して毛根の発育を促進する優れた効果を有し、且つ保湿性に優れ、べたつきのない官能特性に優れた新規化粧料を提供することにある。
【解決手段】プロアントシアニジンを主成分とする松樹皮由来成分を含有することを特徴とする化粧料、並びにプロアントシアニジンを主成分とする松樹皮由来成分とジイソプロピルアミンジクロロアセテートとを含有することを特徴とする化粧料によって達成される。

1

【特許請求の範囲】

【請求項１】　下記一般式のプロアントシアニジンを主成分とする松樹皮由来成分を含有することを特徴とする化粧料。

【化１】



（但し、式中で、ｎは１～１０００の個数、Ｒは水素原子または水酸基を示す。）

【請求項２】　プロアントシアニジンを主成分とする松樹皮由来成分とジイソプロピルアミンジクロロアセテートとを含有することを特徴とする化粧料。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】本発明は、皮膚老化防止効果（活性酸素抑制、過酸化脂質抑制効果、荒れ肌改善効果、角質改善効果、ターンオーバー速度を速くする効果）に優れ、頭皮における毛根の代謝を賦活して毛根の発育を促進する優れた効果を有し、且つ保湿性に優れ、べたつきのない官能特性に優れた新規化粧料に関する。

【０００２】

【従来の技術】一般に、老化皮膚とは、乾燥して滑らかさのない荒れ肌で、角質細胞剥離現象が認められる皮膚である。そして老化皮膚は、ターンオーバー速度が遅く、また皮膚に老化防止効果が付与発現するとターンオーバー速度が速くなると言われている。これまで荒れ肌、老化の視点などから多くの皮膚化粧料（例えば特開平７－３０４６３９号公報、特開平９－１１８６１１号公報、特開平９－１７６００８号公報など）が提案されているが、未だ満足し得るものではない。

【０００３】また、従来より、血行促進物質、また毛髪の栄養成分であるアミノ酸およびビタミン類を配合してなる養毛化粧料が知られている。さらには、皮脂腺の肥大防止効果をもつ成分や、男性ホルモンの抑制作用をもつ成分を配合する医療用養毛剤や養毛化粧料も数多く提案されている。

【０００４】しかし、従来より使用されている血行促進物質は、皮膚刺激が強くその配合量に制限があったり、血行促進の持続時間が短いという欠点がある。

【０００５】ところで、男性型脱毛症は男性ホルモンの過剰作用が原因の一つと言われているが、血行の不良や毛母細胞の活性低下、皮脂腺の肥大化、頭皮の線維化等の現象が複雑に絡みあって生じていると推察されている。

2

【０００６】しかし、男性ホルモンの過剰作用が原因といわれる毛母細胞の活性低下や皮脂腺の肥大化を抑制するために、単に抗男性ホルモン剤等を育毛剤として用いても、育毛作用を発現するまでには至らないのが現状である。また、毛母細胞賦活剤や血行促進剤を用いても、良好な成績は得られない。

【０００７】前記の問題点を解決する手段として、数多くの養毛・育毛剤（例えば特開平５－５８８５０号公報、特開平５－１３９９３６号公報、特開平５－１７０６２５号公報など）が提案されているが、末梢血流を促進し、毛母細胞の賦活化をする物質を用いても格段の育毛作用については見出せず、また組成物においても充分満足すべき効果を得るまでには至らず、育毛効果、脱毛予防効果に改良の余地があるのが実情である。

【０００８】一方、化粧品には、皮膚の恒常性維持や冬場の乾燥から肌を守る等の目的で保湿剤が配合されている。従来より用いられてきた保湿剤としては、グリセリン、プロピレングリコールおよびソルビトールに代表される水溶性多価アルコール、ヒアルロン酸およびキサンタンガムに代表される水溶性高分子、ピロリドンカルボン酸塩およびアミノ酸に代表される天然保湿因子、セラミドに代表される細胞間脂質等が挙げられる。

【０００９】従来の保湿剤を配合した化粧料は、一定の効果を有するものの、水溶性多価アルコールおよび水溶性高分子は、塗布時および塗布直後にべたつき感を有するものが多く、官能特性上必ずしも満足すべきものではなく、これを改善した化粧料が求められている。

【００１０】

【発明が解決しようとする課題】従って、本発明の目的は、皮膚老化防止効果（活性酸素抑制効果、過酸化脂質抑制効果、荒れ肌改善効果、角質改善効果、ターンオーバー速度を速くする効果）に優れ、頭皮における毛根の代謝を賦活して毛根の発育を促進する優れた効果を有し、且つ保湿性に優れ、べたつきのない官能特性に優れた新規化粧料を提供することにある。

【００１１】

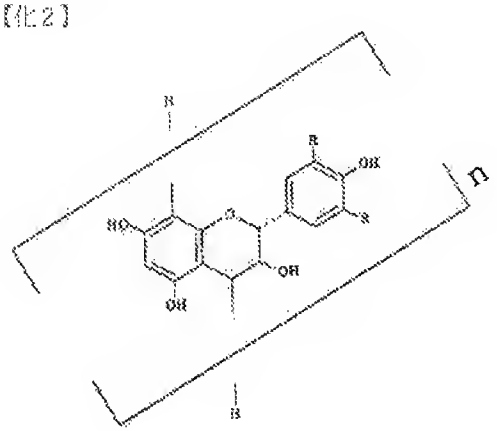
【課題を解決するための手段】本発明者は、このような実情に鑑み、優れた皮膚老化防止効果（活性酸素抑制効果、過酸化脂質抑制効果、荒れ肌改善効果、角質改善効果、ターンオーバー速度を早くする効果）および毛根の発育を促進する効果に優れ、且つ保湿性に優れ、皮膚に対しべたつきがない化粧料について鋭意検討した結果、プロアントシアニジンを主成分とする松樹皮由来成分を配合した化粧料、好ましくはプロアントシアニジンを主成分とする松樹皮由来成分とジイソプロピルアミンジクロロアセテートとを組み合わせて配合した化粧料に前記

の優れた効果を有するとともに、幅広い製剤に適用可能であることを見いだして本発明を完成するに至った。

【００１２】即ち、本発明は、下記一般式のプロアントシアニジンを主成分とする松樹皮由来成分を含有することを特徴とする化粧料、およびプロアントシアニジンを主成分とする松樹皮由来成分とジイソプロピルアミンジクロロアセテートとを含有することを特徴とする化粧料である。

【００１３】

【化２】



【００１４】（但し、式中で、ｎは１～１０００の個数、Ｒは水素原子または水酸基を示す。）

【００１５】

【発明の実施の形態】以下、本発明の構成の詳細について説明する。

【００１６】本発明に用いられるプロアントシアニジン（Proanthocyanidin）を主成分とする松樹皮由来成分としては、プロアントシアニジンが約２０～７０％以上の高含量を認める松樹皮、例えばフランス海岸松から水または特定の有機溶媒を用いて抽出して調製したものが挙げられるが、またそれら抽出物をコストが許容される範囲で濃縮、分子ふるい、クロマトグラフィーなどによる精製によって調製されたものでも良い。具体的にはホーファー・リサーチ・ラボラトリー社（スイス）製の原料ピクノジェノール（商品名、粉末状）が特に好ましいものとして挙げられる。該ピクノジェノールは、フランスのボルドー地方とピレネー山脈の大西洋沿岸に生育する学名：PINUS　PINSTER、フランス海岸松と呼ばれる松の樹皮より抽出された物質である。該ピクノジェノールには６０％以上のプロアントシアニジンを主成分として含み、それ以外に４０種以上の有機酸（ポリフェノールなど）を含むものである。

【００１７】尚、本発明に用いられるプロアントシアニジン（Proanthocyanidin）を主成分とする松樹皮由来成分は、他の穀物、果物に含有するプロアントシアニジン（例えば、特開平０６－３３６４２１号公報）また特開平０２－１３４３０９号公報に記載のプロシアニジンとは異なり、抗チロシナーゼ（マッシュルームチロシナーゼ）活性が認められない成分である。

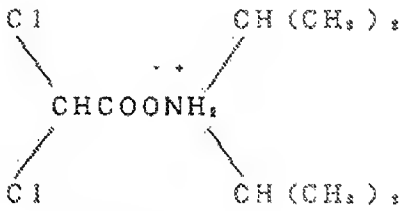
【００１８】本発明に用いられるプロアントシアニジンを主成分とする松樹皮由来成分を調製する際の抽出溶媒としては、例えばフランス海岸松の樹皮を、水、エタノール、エタノール水溶液、ベンゼン、アセトンなどで抽出、調製されたものが挙げられる。

【００１９】本発明に用いられるプロアントシアニジンを主成分とする松樹皮由来成分の配合量（抽出液の乾燥固形分換算）としては、当該化粧料の総量を基準として、０．０１～１０重量％が相応しく、特に０．０５～５重量％が好ましい。０．０１重量％より少ないと効果の発現性が充分でない場合があり、また１０重量％より多い量ではそれ以上の効果はそれ程期待できない場合がある。

【００２０】また、本発明で用いるジイソプロピルアミンジクロロアセテート（ＤＡＤＡと略称）とは、下記式で示されるもので、白色結晶性の粉末状を呈し、匂いは殆んどなく、味は苦く、水、エタノール等に溶けやすい。また、その融点は、１１８～１２２℃で５％水溶液のｐＨは５．６～６．８である。

【００２１】

【化３】



【００２２】本発明に用いられるジイソプロピルアミンジクロロアセテートの配合量としては、当該化粧料の総量を基準として、０．０１～１０重量％が相応しく、特に０．０５～５重量％が好ましい。０．０１重量％より少ないと効果の発現性が充分でない場合があり、また１０重量％より多い量ではそれ以上の効果はそれ程期待できない場合がある。

【００２３】本発明の化粧料の形態としては、化粧水、クリーム、乳液、ファンデーション、パック、浴用剤、ヘアートニック、ヘアーローション、ヘアートリートメント、ヘアークリーム、ヘアーコンディショナー、ヘアージェル、ヘアーミスト、ヘアーフォーム、コロン、洗顔料、ボディーシャンプー、シャンプー、リンスおよび浴用剤等が挙げられる。

【００２４】本発明に用いられる有効成分以外に、化粧料一般に許容されるところの組成物を構成するための基剤、香料、防腐剤、保存剤、保湿剤、薬効物質および界面活性剤等を適宜配合することができる。

【００２５】

【実施例】以下実施例により本発明を更に詳細に説明する。尚、以下における％表示は、特に指定しない限り、重量％を示す。尚、実施例に先立ち（１）角質層のター

ンオーバー速度測定方法、（２）荒れ肌改善効果の測定試験法、（３）角質改善効果の測定試験法、（４）マウス毛成長促進効果試験法、（５）ヒト頭髪毛成長促進効果試験法、（６）活性酸素生成抑制試験、（７）過酸化脂質抑制試験、（８）保湿性試験、（９）官能（ベタツキ感）試験を説明する。

【００２６】（１）角質層のターンオーバー速度測定方法

蛍光色素のダンシルクロリドを白色ワセリン中に５％配合した軟膏を作り、被験者の前腕部の皮膚に２４時間閉塞塗布し、角質層にダンシルクロリドを浸透結合させた。その後同じ部位に１日２回（朝、夕）被験試料を塗布し、毎日ダンシルクロリドの蛍光を調べ、その蛍光が消滅するまでの日数を皮膚角質層のターンオーバー速度とした。

【００２７】（２）荒れ肌改善効果の測定試験法

下腿に荒れ肌を有する中高年被験者２０名を対象として４週間連続塗布効果を調べた。被験者の左側脚試験部位に１日２回約１ｇの試料を塗布し、試験開始前および終了後の皮膚の状態を表１の判定基準により判定した。なお、右側下脚は試料を塗布せず対象とした。

【００２８】

【表１】

皮膚乾燥度の判定基準	
ー	正常
±	軽微乾燥、落屑なし
＋	乾燥、落屑軽度
＋＋	乾燥、落屑中等度
＋＋＋	乾燥、落屑強者

【００２９】試験前後の試験部位と対照部位の判定結果を比較し、皮膚乾燥度が２段階以上改善された場合（例えば＋→ー，＋＋→±）を「有効」、１段階改善された場合を「やや有効」、変化がなかった場合を「無効」とした。試験結果は「有効」、「やや有効」となった被験者の人数で示した。

【００３０】（３）角質改善（角質細胞の抗剥離性増大）効果の測定試験法

前述の荒れ肌改善測定試験開始前および終了後の被験部皮膚にスコッチテープ（ニチバンメンディングテープ）を接着し、これを剥離した時テープに付着した角質細胞の状態を走査型電子顕微鏡によって詳細に調べ、表２の判定基準によって皮膚角質層細胞剥離性を分類し、角質改善効果を求めた。

【００３１】

【表２】

角質改善（角質細胞の抗剥離性増大）効果の判定基準	
評価点1	スケールを認めず
評価点2	小スケール点在
評価点3	小～中スケール顕著
評価点4	大スケール顕著

【００３２】判定は４週間連続塗布後の試験部位の評価点と対照部位のそれとの差が２点上の場合を「有効」、１点の場合を「やや有効」、０点の場合を「無効」とした。試験結果は「有効」、「やや有効」となった被験者の人数で示した。

【００３３】（４）マウス毛成長促進効果試験法

Ｃ３Ｈ系マウス（雄・８週齢・平均体重３５ｇ）の背部中央の皮膚を電気バリカンで刈った後、シェーバーにより完全に除毛した。翌日より実施例および比較例の各試料を被験部皮膚に毎日１回、一匹当り０．２ｍｌ塗布した。一試料に対して動物は一群１０匹を使用した。実験開始後１４日目に動物を屠殺し、被験部皮膚の写真撮影を行なった。つぎに、写真を画像解析装置に取り込み、最初に毛刈りした面積（Ａ）と、発毛面積（Ｂ）を求め、さらに

マウス毛成長促進効果＝（Ｂ）／（Ａ）

を個々の動物について算出した。

【００３４】（５）ヒト頭髪毛成長促進効果試験法

３０～４０代の毛成長に衰えの認められる男性被験者１０名の頭頂部の頭髪を直径約７ｍｍの円形状に剃毛した。更に、毛刈り１日後及び３日後に林らの方法（ブリティッシュ・ジャーナル・オブ・デルマトロジー、１２５巻，１２３頁、１９９１年）により毛成長速度を対象部位の毛髪（約３０～４０本）について求めて、平均値（Ａ）を計算した。次に各被験者に被験部位を中心として、実施例又は比較例の試料を毎日朝夕２回、約３ｍｌ塗布し、よくマッサージさせた。試験開始３ケ月目に同様にして同一部位の毛成長速度の測定を行い、平均値（Ｂ）を計算した。効果の判定は、各養毛化粧料使用前後の比（Ｂ）／（Ａ）を比較することにより行った。

【００３５】（６）活性酸素生成抑制試験

０．０５Ｍ炭酸ナトリウム緩衝液（ｐＨ１０．２）２．４ｍｌ、３ｍＭキサンチン０．１ｍｌ、３ｍＭＥＤＴＡ０．１ｍｌ、０．１５％牛血清アルブミン０．１ｍｌ、０．７５ｍＭ ニトロブルーテトラゾリウム０．１ｍｌの組成中に、試料溶液（０．００１～０．０５％の５０％エタノール水溶液）を０．１ｍｌ加え、２５℃、１０分加温する。そこにバターミルク由来の１５０倍希釈キサンチンオキシダーゼ（シグマ社製）０．１ｍｌを加え、２５℃、２０分間反応する。６ｍＭ塩化銅０．１ｍｌ加え、反応を停止して，分光光度計を用いて波長５６０ｎｍにて吸光度を測定する。試料溶液の代わりに、対照として５０％エタノール溶液を０．１ｍｌ加えたものの吸光度を測定した。この対照に対する抑制率（％）を求め、５０％抑制の濃度をＩＣ５０（％）として表示した。

【００３６】（７）過酸化脂質抑制試験

リノール酸メチル０．３ｍｌ、１ｍＭヒポキサンチン（０．１％TritonX-100）、試料溶液（０．０１～０．１％の５０％エタノール水溶液）０．４ｍｌ、蒸留水、バターミルク由来の１０倍希釈キサンチンオキシダーゼ（シグマ社製）０．１５ｍｌの混合液を３７℃、２４時

間振とう反応する。該組成物０．３ｍｌに１０％リンタングステン酸０．５ｍｌ、０．６７％チオバルビツール酸１．０ｍｌを加え撹拌の後、９５～１００℃、３０分間加熱後、急冷してｎ－ブタノールを加え振とう撹拌後、遠心（3000rpm、１０分）を行い、上清を分光光度計を用いて波長５３５ｎｍにて吸光度を測定した。試料溶液の代わりに、対照として５０％エタノール溶液を０．４ｍｌ加えたものの吸光度を測定した。この対照に対する抑制率（％）を求め、５０％抑制の濃度をＩＣ$_{50}$（％）として表示した。

【００３７】（８）保湿性試験
試料濃度を２．０％に調整した水溶液を健常人の前腕屈側部に塗布し、３０分後の水分量をインピーダンスメーターで電気導伝度として測定した。結果は、塗布前を１００とした際の相対値で示した。

【００３８】（９）官能試験
２０名の女性パネラーによる官能試験を実施し，化粧料塗布時および塗布後にべたつき感を感じるか否かを評価し、「感じない」と答えたパネラーの人数で示した。

【００３９】実施例１～２，比較例１～３

【００４０】（活性酸素生成抑制効果および過酸化脂質抑制効果）活性酸素生成抑制効果は、ピクノジェノール［ホーファー・リサーチ・ラボラトリー社（スイス）製の原料］の前記方法記載の濃度の５０％エタノール水溶液を調製（実施例１）した。また過酸化脂質抑制効果は、ピクノジェノールの前記方法記載の濃度の５０％エタノール水溶液を調製（実施例２）した。それぞれの比較例である５０％エタノール水溶液をそれぞれ比較例１、比較例２とした。その結果、表３に示したごとく比較例１、比較例２に比較して実施例１および実施例２は優れた活性酸素生成抑制効果および過酸化脂質抑制効果を示した。

【００４１】
【表３】

	活性酸素生成抑制	過酸化脂質抑制
	IC_{50}(%)	
比較例１	0	—
実施例１	0.0002	—
比較例２	—	0
実施例２	—	0.004

【００４２】実施例３～４，比較例３～５
（官能試験）ピクノジェノール［ホーファー・リサーチ・ラボラトリー社（スイス）製の原料を２．０％配合した活性剤（Ｐｏｌｙｓｏｒｂａｔｅ８０）水溶液を調製（実施例３）し、ピクノジェノールおよびジイソプロピルアミンジクロロアセテーをそれぞれ１．０％配合した活性剤（Ｐｏｌｙｓｏｒｂａｔｅ８０）水溶液をそれぞれ調製（実施例４）した。また比較例３、４として、それぞれグリセリン、ピロリドンカルボン酸ナトリムの２．０％配合水溶液を調製し、水を比較例５とした。

【００４３】
【表４】

（試　料）	保湿性試験(%)	官能試験（人）（べたつき感）
実施例3(ピクノジェノール)	163	15
実施例4(ピクノジェノール＋DADA)	182	16
比較例3(グリセリン)	142	6
比較例4(ピロリドンカルボン酸ナトリウム)	123	3
比較例5(水)	107	6

【００４４】表４の結果から明らかな如く、比較例５の水に比較して本発明に用いられるピクジェノール（実施例３）およびピクノジェノールとＤＡＤＡとの組み合わせ（実施例４）は保湿性、べたつき感において優れていた。一方、グリセリン（比較例３）およびピロリドンカルボン酸ナトリウム（比較例４）は保湿性、べたつき感※※において劣っていた。

【００４５】実施例５～９、比較例６（スキンクリーム）
ピクノジェノール［ホーファー・リサーチ・ラボラトリー社（スイス）製の粉末原料を利用した。

【００４６】

組成	配合（％）
（Ａ）自己乳化型モノステアリン酸グリセリン	３．５
モノステアリン酸ソルビタン	１．５
（Ｂ）流動パラフィン	２５．０
鯨ロウ	５．０
ラノリン	５．０
セタノール	２．０
（Ｃ）グリセリン	３．０
カルボキシルビニルポリマー	５．０
有効成分	表５に記載

Ｐ－オキシ安息香酸エステル	０．２
精製水	残量
（Ｄ）香料	０．２

【００４７】調製方法
上記の（Ａ）群の原料を７０℃で溶解し、原料（Ｂ）と混合した後、７８℃にした。次いでこれを、７５℃に加熱した原料（Ｃ）へ攪拌しながら徐々に加え、予備乳化を行った。その後ホモジナイザーにかけて乳化を完全に行い、５０℃に冷却後、（Ｄ）を添加し、３０℃まで冷却した。

【００４８】スキンクリームの諸試験を実施した結果を＊表５に示す。ピクノジェノール（実施例５、６、７）およびピクノジェノールとＤＡＤＡとを配合した（実施例８、９）は、比較例６に比較し、ターンオーバー速度、荒れ肌改善効果、角質改善効果いずれの試験においても優れた効果を示した。

【００４９】
【表５】

	ピクノジェノール（配合量％）	DADA（配合量％）	ターンオーバー速度（日）	荒れ肌改善効果（人）	角質改善効果（人）
比較例６	—	—	16．3±0．4	4	3
実施例５	0.5	—	15．2±0．7	8	5
実施例６	1	—	14．8±0．5	8	8
実施例７	3	—	14．1±0．2	12	11
実施例８	0.5	0.5	14．4±0．5	10	10
実施例９	1.5	1.5	12．9±0．3	16	16

【００５０】実施例１０　（化粧水）
【００５１】

組成	％
エタノール	１０．０
ポリオキシエチレン硬化ヒマシ油	０．２
パラベン	０．１
実施例５記載のピクノジェノール	２．０
香料	０．０１
グリセリン	３．０
リン酸水素２ナトリウム	０．０２
リン酸２水素カリウム	０．０８
水	全量を１００％

【００５２】上記に示した組成の如く本発明の化粧水を常法により調製し、前記ターンオーバー速度、荒れ肌改善効果、角質改善効果、保湿性および官能性について各種試験を実施した結果、本発明の化粧水（実施例１０）は、有効成分を含まない化粧水と比較しいずれの点でも優れており、パネラー２０名中、１４名にしっとり感があり、べたつき感がないとの評価であった。

【００５３】実施例１１　（乳液）
【００５４】

組成	％
スクアラン	５．０
モノグリ	１．２
ベヘニルアルコール	０．５
ワセリン	２．０
パラベン	０．２
実施例５記載のピクノジェノール	１．０
キサンタンガム	０．１
１，３－ＢＧ	５．０
アシルグルタミン酸ナトリウム	０．５
水	全量を１００％

【００５５】
実施例１２～１６、比較例７　（ヘアートニック）
【００５６】

組成	％
エタノール	４０．０
有効成分	表６記載
グリセリン	１．０
メントール	０．０３
香料	０．０１
イソプロピルメチルフェノール	０．１
水	全量を１００％

【００５７】上記に示した組成の如く本発明のヘアートニックを常法により調製し、前記、マウス毛成長促進効果およびヒト頭髪毛成長促進効果について各試験を実施した結果（表６）、本発明のヘアートニック（実施例１２～１６）は、有効成分を含まないヘアートニック（比較例７）と比較しいずれの点でも優れていた。また、保湿性および官能性について各試験を実施した結果、パネラー２０名中、１６名にしっとり感があり、べたつき感がないとの評価であった。

【００５８】
【表６】

11　　12

	ピクノジェノール（配合量%）	DADA（配合量%）	マウス毛成長促進効果	ヒト頭髪毛成長促進効果
比較例7	—	—	1.04	1.02
実施例12	0.5	—	1.23	1.21
実施例13	1	—	1.32	1.28
実施例14	3	—	1.43	1.41
実施例15	0.5	0.5	1.36	1.37
実施例16	1.5	1.5	1.45	1.44

【００５９】実施例１７　（シャンプー）　　＊　＊【００６０】

組成	%
ヤシ油脂肪酸ジエタノールアミド	５．０
ポリオキシエチレンラウリル硫酸ナトリウム	１２．０
ポリオキシエチレンアルキルスルホコハク酸ナトリウム	７．０
ヤシ油脂肪酸プロピルジメチルアミノ酢酸ベタイン	１０．０
実施例５記載のピクノジェノール	１．０
香料	０．３
水	全量を１００％

【００６１】実施例１８　（浴用剤）

【００６２】

組成	%
塩化ナトリウム	１０．０
塩化カリウム	６．０
炭酸水素ナトリウム	３５．０
グリセリン	０．２
実施例５記載のピクノジェノール	１．０
無水ケイ酸	１．０
１，３－ＢＣ	０．００１
香料	０．５
乾燥硫酸ナトリウム	全量を１００％

【００６３】実施例１７の本発明のシャンプーは、パネラー２０名中、１１～１４名の範囲で有効成分を含まな※いシャンプーと比較し、髪がしっとりするとの評価であり、実施例１８の本発明の浴用剤は、パネラー２０名中、１１～１６名の範囲で有効成分を含まない浴用剤と比較し何れも荒れ肌改善効果、角質改善効果および官能試験において優れており、肌がしっとりするとの評価であった。

【００６４】

【発明の効果】以上記載の如く、本発明により、皮膚老化防止効果（活性酸素抑制効果、過酸化脂質抑制効果、荒れ肌改善効果、角質改善効果、ターンオーバー速度を速くする効果）に優れ、頭皮における毛根の代謝を賦活して毛根の発育を促進する優れた効果を有し、且つ保湿性に優れ、べたつきのない官能特性に優れた新規化粧料を提供することは明らかである。

フロントページの続き

(51)Int.Cl.'	識別記号	FI		ﾃｰﾏｺｰﾄﾞ（参考）
Ａ６１Ｋ　7/00		Ａ６１Ｋ　7/00	Ｗ	
Ａ６１Ｐ　17/00		31/00	６１７	
17/16			６１７Ｊ	
Ａ６１Ｋ　35/78		35/78	Ｃ	
// Ａ６１Ｋ　7/06		7/06		
7/075		7/075		
7/50		7/50		
Ｃ０７Ｄ 311/62		Ｃ０７Ｄ 311/62		

(72)発明者　山口　さゆり
神奈川県小田原市寿町５丁目３番28号　鐘紡株式会社基礎科学研究所内

Fターム(参考) 4C062 FF03 FF50
4C083 AA082 AA111 AA112 AB172
AB282 AB312 AB332 AB352
AC012 AC022 AC072 AC102
AC122 AC242 AC422 AC432
AC442 AC472 AC482 AC642
AC662 AC712 AC782 AC792
AC811 AC812 AC841 AC842
AD011 AD012 AD092 AD352
AD512 AD532 CC04 CC05
CC25 CC33 CC38 DD23 DD27
DD31 EE07 EE12 EE13 EE22
EE42 FF05
4C088 AB03 AC06 AC08 BA08 BA09
BA10 CA05 CA06 CA07 CA08
CA09 CA14 MA17 MA22 MA28
MA63 MA14 ZA89 ZC33 ZC75

Abstract of CITED REF. 11

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-228834
(43)Date of publication of application : 22.08.2000

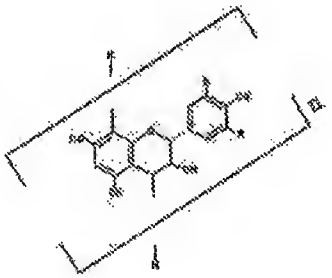
(51)Int.Cl. A61K 7/48
A61K 7/00
A61P 17/00
A61P 17/16
A61K 35/78
// A61K 7/06
A61K 7/075
A61K 7/50
C07D311/62

(21)Application number : 11-032480
(22)Date of filing : 10.02.1999

(71)Applicant : KANEBO LTD
HANAOKA SHUSUKE
(72)Inventor : HASUNUMA KYOTARO
HANAOKA SHUSUKE
MORITA KAZUYOSHI
YAMAGUCHI SAYURI

(54) COSMETIC

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain a cosmetic excellent in preventing effect from getting older, activating metabolism of hair roots on a scalp and having excellent effect improving growth of the hair roots.
SOLUTION: This cosmetic includes (A) a component originated in pine bark including proanthocyanidin of formula I (n is 1-1,000; R is H or OH) as a main component and preferably (B) diisopropylaminedichloroacetate. The component A is a substance extracted from pine bark of French beach pine growing in the Bordeaux area of France and Atlantic coast of Pyrenean mountains and its dosage is preferably 0.01-10 wt.% based on total weight of the objective cosmetic and the dosage of component B is preferably 0.01-10 wt.%.



* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]this invention -- a skin aging preventive effect (active oxygen control and peroxylipid depressor effect.) it is related with the new cosmetic which is excellent in a chapped skin improvement effect, a keratin improvement effect, and the effect that makes turnover speed quick, and has the outstanding effect which carries out activation of the metabolic turnover of the hair root in the scalp, and promotes growth of a hair root, and was excellent in moistness, and was excellent in the sensory characteristic without stickiness.
[0002]
[Description of the Prior Art]Generally, the aging skin is the chapped skin which dries and does not have smoothness, and is the skin a horny cell exfoliation phenomenon is accepted to be. And the aging skin has a slow turnover speed, and if antiaging effects carry out a grant manifestation at the skin, it is said that turnover speed becomes quick. Although many skin cosmetics (for example, JP,H7-304639,A, JP,H9-118611,A, JP,H9-176008,A, etc.) are proposed from chapped skin, the viewpoint of aging, etc. until now, it may not yet be satisfied.
[0003]The hair-growing cosmetic which blends the circulation promoting agent, the amino acid which is the nutritional information of hair, and vitamins is known from before. Many medical-application hair tonics which blend an ingredient with the hypertrophy preventive effect of a sebaceous gland and an ingredient with the depressant action of a male sex hormone, and hair-growing cosmetics are also proposed.
[0004]However, a skin stimulus is strong, and the circulation promoting agent currently used conventionally has restriction in the loadings, or there is a fault that the temporal duration of circulation promotion is short.
[0005]By the way, it is guessed that phenomena, such as an activity fall of the defect of circulation or hair mother cells, hypertrophy of a sebaceous gland, and fibrosis of the scalp,

became entangled intricately, and have produced male pattern hair loss although the superfluous operation of a male sex hormone is called one of the causes.

[0006]However, the actual condition is not resulting, by the time it reveals a hair restoring effect even if it only uses an antiandrogen agent etc. as a hair restorer, in order that a superfluous operation of a male sex hormone may control the activity fall of hair mother cells and the hypertrophy of a sebaceous gland which are called cause. Good results are not acquired even if it uses a hair-mother-cells activator and a circulation accelerator.

[0007]Although many hair growing and hair restorers (for example, JP,H5-58850,A, JP,H5-139936,A, JP,H5-170625,A, etc.) are proposed as a means to solve the aforementioned problem, The actual condition is that will not result by the time it acquires the effect which should promote a peripheral blood style, cannot be found out about a marked hair restoring effect even if it uses the substance which activates hair mother cells, and should be enough satisfied also in a constituent, but a hair restoration effect and a depilation preventive effect have room of improvement.

[0008]On the other hand, the moisturizer is blended with cosmetics for the purpose, such as protecting skin from constant maintenance of the skin, or desiccation of a winter season. The water-soluble polyhydric alcohol represented by glycerin, propylene glycol, and sorbitol as a moisturizer used conventionally, The natural moisturizing factor represented by the water soluble polymer, pyrrolidone-carboxylic-acid salt, and amino acid which are represented by hyaluronic acid and xanthan gum, the intercellular lipid represented by ceramide, etc. are mentioned.

[0009]Although the cosmetic which blended the conventional moisturizer has a fixed effect, water-soluble polyhydric alcohol and the water soluble polymer should have many which are sticky immediately after the time of spreading, and spreading, and have admiration, and should not necessarily be satisfied on a sensory characteristic, and the cosmetic which has improved this is called for.

[0010]

[Problem to be solved by the invention]therefore, the purpose of this invention -- a skin aging preventive effect (active oxygen depressor effect and peroxylipid depressor effect.) it is in providing the new cosmetic which is excellent in a chapped skin improvement effect, a keratin improvement effect, and the effect that makes turnover speed quick, and has the outstanding effect which carries out activation of the metabolic turnover of the hair root in the scalp, and promotes growth of a hair root, and was excellent in moistness, and was excellent in the sensory characteristic without stickiness.

[0011]

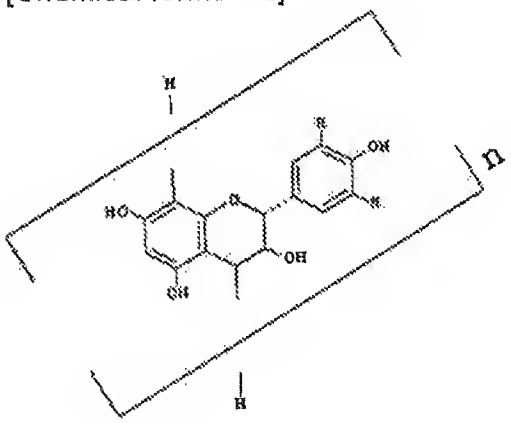
[Means for solving problem]the skin aging preventive effect (active oxygen depressor effect.) in which this invention person was excellent in view of such the actual condition It excels in the

effect which promotes growth of peroxylipid depressor effect, a chapped skin improvement effect, a keratin improvement effect, the effect that carries out turnover speed early, and a hair root, And the result of having examined wholeheartedly the cosmetic which is excellent in moistness and does not have stickiness to the skin, The cosmetic which blended the Matsuki hide origin ingredient which uses a pro anthocyanidin as the main ingredients, While having the aforementioned outstanding effect in the cosmetic which blended the pro anthocyanidin combining the Matsuki hide origin ingredient and diisopropylamine dichloro acetate which are used as the main ingredients preferably, it finds out that it can apply to broad pharmaceutical preparation, and came to complete this invention.

[0012]That is, this inventions are a cosmetic containing the Matsuki hide origin ingredient which uses the pro anthocyanidin of a following general formula as the main ingredients, and a cosmetic containing the Matsuki hide origin ingredient which uses a pro anthocyanidin as the main ingredients, and diisopropylamine dichloro acetate.

[0013]

[Chemical formula 2]



[0014](However, as for n, the number of 1-1000 and R show a hydrogen atom or a hydroxyl group in a formula.)

[0015]

[Mode for carrying out the invention]Hereafter, the details of the composition of this invention are explained.

[0016]As a Matsuki hide origin ingredient which uses as the main ingredients the pro anthocyanidin (Proanthocyanidin) used for this invention, Although what the pro anthocyanidin extracted from the Matsuki hide which accepts not less than about 20 to 70% of high content, for example, the France seashore pine, using water or a specific organic solvent, and prepared is mentioned, It could be prepared by refining by concentration, a molecular sieve, chromatography, etc. in the range in which cost is permitted in these extracts. specifically, raw material PIKUNOJIE Norian (a trade name -- powdered) by the Hofer research laboratory

company (Switzerland) is especially mentioned as a desirable thing. Scientific name which this PIKUNOJIE Norian grows to the Atlantic coast in in the Bordeaux district and the Pyrenees of France :P It is the substance extracted from the bark of the pine called INUS PINSTER and the France seashore pine. Not less than 60% of pro anthocyanidin is included in this PIKUNOJIE Norian as the main ingredients, and 40 or more sorts of organic acid (polyphenol etc.) is included in addition to it.

[0017]The Matsuki hide origin ingredient which uses as the main ingredients the pro anthocyanidin (Proanthocyanidin) used for this invention, the pro anthocyanidin (for example, JP,H06-336421,A) contained to other grain and fruit -- it is an ingredient anti-tyrosinase (mushroom tyrosinase) activity is not accepted to be to JP,H02-134309,A again unlike the pro cyanidin of a description.

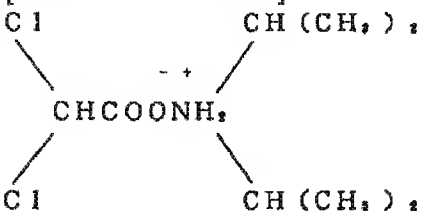
[0018]As an extracting solvent at the time of preparing the Matsuki hide origin ingredient which uses as the main ingredients the pro anthocyanidin used for this invention, what the bark of the France seashore pine was extracted by water, ethanol, an ethanol solution, benzene, acetone, etc., and was prepared is mentioned, for example.

[0019]As loadings (dry solid conversion of an extract) of the Matsuki hide origin ingredient which uses as the main ingredients the pro anthocyanidin used for this invention, 0.01 to 10 weight % is suitable on the basis of the total amount of the cosmetic concerned, and 0.05 to 5 weight % is especially preferred. if less than 0.01 weight %, the manifestation nature of an effect may not be enough, and in more quantity than 10 weight %, the effect beyond it may be unable to be expected so much.

[0020]The diisopropylamine dichloro acetate (DADA and abbreviated name) used by this invention is shown by the following formula, and presents the shape of powder of white-crystals nature, and a smell does not have ******, and the taste is bitter and melts into water, ethanol, etc. easily. The pH of 5% solution of the melting point is 5.6-6.8 at 118-122 **.

[0021]

[Chemical formula 3]



[0022]As loadings of the diisopropylamine dichloro acetate used for this invention, 0.01 to 10 weight % is suitable on the basis of the total amount of the cosmetic concerned, and 0.05 to 5 weight % is especially preferred. if less than 0.01 weight %, the manifestation nature of an effect may not be enough, and in more quantity than 10 weight %, the effect beyond it may be unable to be expected so much.

[0023]As a form of the cosmetic of this invention, face toilet, cream, a milky lotion, foundation, A pack, baths, a tonic, a hair lotion, a hair treatment, hair cream, a hair conditioner, hair gell, hair mist, hair form, a colon, a facial wash, body shampoo, a shampoo, rinse, baths, etc. are mentioned.

[0024]A base, perfume, an antiseptic, a preservative, a moisturizer, a drug effect substance, a surface-active agent, etc. for constituting the constituent permitted by the general cosmetic in addition to the active principle used for this invention can be blended suitably.

[0025]

[Working example]An embodiment explains this invention still in detail below. Especially the following % displays show weight %, unless it specifies. In advance of an embodiment, the turnover rate measurement method of (1) horny layer, a measurement test method of (2) chapped-skin improvement effect, (3) Explain the measurement test method of a keratin improvement effect, the (4) mouse hair growth promoting effect examining method, the (5) Homo sapiens hair hair growth promoting effect examining method, (6) active-oxygen generation inhibition test, (7) peroxylipid inhibition test, (8) moistness examinations, and (9) organic-functions (feeling of smeariness) examination.

[0026](1) The ointment which blended the dansyl chloride of the turnover rate measurement method fluorochrome of a horny layer 5% into white vaseline was made, blockade spreading was carried out for 24 hours at the skin of a test subject's front arm part, and the horny layer was made to carry out osmosis combination of the dansyl chloride. The bis die (morning, the evening) test sample was applied to the part same after that, the fluorescence of the dansyl chloride was investigated every day, and days until the fluorescence is extinguished were made into the turnover speed of a skin horny layer.

[0027](2) The continuation spreading effect was investigated for four weeks to the measurement test method leg of the chapped skin improvement effect for 20 middle-aged test subjects who have chapped skin. The sample of about 1 g of bis dice was applied to a test subject's left-hand side leg examination part, and the state of the skin before the start of test and after an end was judged by the judging standard of Table 1. The right-hand side leg did not apply a sample, but targeted it.

[0028]

[Table 1]

皮膚乾燥度の判定基準	
−	正常
±	軽微乾燥、発痒なし
+	乾燥、発痒軽度
++	乾燥、発痒中等度
+++	乾燥、発痒著者

[0029]The decided result of the examination part before and behind an examination and a contrast part was compared, and the case where there was "no it is effective" about the case

(for example, +->-, ++->**) where two or more steps of the degrees of xerosis cutis have been improved, and there were not "slightly effective" and change about the case where one step has improved was made into "invalidity." The number of the test subject who became "effective" and ["slightly effective"] showed the test result.

[0030](3) Scotchtape (Nichiban mending tape) is pasted up on the examined skin before the start of the chapped skin improvement measurement test of the measurement test method above-mentioned of the keratin improvement (anti-detachability increase of horny cell) effect, and after an end, When this was exfoliated, the state of the horny cell adhering to a tape was investigated in detail with the scanning electron microscope, skin horny layer cell detachability was classified according to the judging standard of Table 2, and the keratin improvement effect was searched for.

[0031]

[Table 2]

角質改善(角質細胞の抗剥離性増大) 効果の判定基準	
評価点1	スケールを認めず
評価点2	小スケール点在
評価点3	小～中スケール顕著
評価点4	大スケール顕著

[0032]The judgment made [the case where the difference of the evaluation items of the examination part after four week continuation spreading and that of a contrast part was on two points] "slightly effective" and the case of zero point "invalidity" for "effective" and the case of one point. The number of the test subject who became "effective" and ["slightly effective"] showed the test result.

[0033](4) the mouse hair growth promoting effect examining method C3 -- after cutting the skin of the center of regions of back of a mouse (the male, 8-week old, and average weight of 35g) with electric hair clipper H system, it depilated thoroughly with the shaver. 0.2 ml per animal of each sample of the embodiment and the comparative example was applied once to the examined skin from the next day every day. The animal used ten groups to one sample. The animal was slaughtered 14 days after the experiment start, and a photograph of an examined skin was taken. Next, a photograph is incorporated into an image analyzing device, the area (A) which carried out hair cutting first, and hair-growing area (B) are determined, and it is mouse hair growth promoting effect =(B)/(A) further.

It computed about each animal.

[0034](5) The hair of the parietal region of ten male test subjects by whom a decline is observed in hair growth of Homo sapiens hair hair growth promoting effect examining method 30-40 generation was shaved to a circle configuration about 7 mm in diameter. Average value (A) was calculated by having asked for the hair growth rate about the hair (about 30-40) of the subject part one day after hair cutting and three days afterward by the method (British journal

OBU DERUMATOROJI, 125 volumes, 123 pages, 1991) of woods. Next, about 3 ml of samples of the embodiment or the comparative example were applied twice to each test subject focusing on the examined part every morning and evening every day, and it was made to often massage. It was made Mr. 3rd month of start **** of test, the hair growth rate of the same part was measured, and average value (B) was calculated. The judgment of the effect was performed by comparing ratio [before and behind each hair-growing cosmetic use] (B)/(A).

[0035](6) 2.4 ml of active oxygen generation inhibition test 0.05M sodium carbonate buffer solution (pH 10.2), 0.1 ml of 3mM xanthins, 3mMEDTA0.1ml, 0.1 ml of 0.15% cow serum albumin, During the presentation of 0.1 ml of 0.75mM nitroblue tetrazoliums, 0.1 ml of sample solutions (0.001 to 0.05% of 50% ethanol solution) are added, and are warmed 25 ** for 10 minutes. 0.1 ml of 150 time dilution xanthine oxidase of butter milk origin (made by a sigma company) is added there, and 25 ** reacts for 20 minutes. In addition, a reaction is suspended and 0.1 ml of 6mM copper chlorides measure an absorbance on the wavelength of 560 nm using a spectrophotometer. Instead of the sample solution, the absorbance of what added 0.1 ml of ethanol solutions 50% as contrast was measured. It asked for the control rate (%) to this contrast, and the concentration of control was displayed as IC_{50} (%) 50%.

[0036](7) 0.3 ml of peroxylipid inhibition test methyl linoleate, 1mM hypoxanthine (0.1%TritonX-100), The shaking reaction of 37 ** of the mixed liquor of 0.4 ml of sample solutions (0.01 to 0.1% of 50% ethanol solution), distilled water, and 0.15 ml of 10 time dilution xanthine oxidase of butter milk origin (made by a sigma company) is carried out for 24 hours. Add 0.5 ml of phosphotungstic acid, and 1.0 ml of 0.67% thiobarbituric acid to these 0.3 ml of constituents 10%, and After stirring, For 95-100 ** and 30 minutes, after heating, it quenched, n-butanol was added, centrifugality (3000 rpm, 10 minutes) was performed after shaking stirring, and the absorbance was measured for supernatant liquid on the wavelength of 535 nm using the spectrophotometer. Instead of the sample solution, the absorbance of what added 0.4 ml of ethanol solutions 50% as contrast was measured. It asked for the control rate (%) to this contrast, and the concentration of control was displayed as IC_{50} (%) 50%.

[0037](8) The solution which adjusted moistness test sample concentration to 2.0% was applied to a healthy person's forearm flexor, and the moisture content of 30 minutes after was measured as electric conductivity with the impedance meter. The relative value at the time of setting spreading before to 100 showed the result.

[0038](9) The organoleptics by the female panelist of 20 organoleptics were carried out, it evaluated whether it would be sticky after the time of cosmetic spreading, and spreading, and admiration would be sensed, and the number of the panelist who answered "Does not feel" showed.

[0039]Embodiments 1-2, the comparative examples 1-3 [0040](Active oxygen generation

depressor effect and peroxylipid depressor effect) Active oxygen generation depressor effect prepared the 50% ethanol solution of the concentration of PIKUNOJIE Norian [raw material by the Hofer research laboratory company (Switzerland)] given [said] in a method (embodiment 1). Peroxylipid depressor effect prepared the 50% ethanol solution of the concentration of PIKUNOJIE Norian given [said] in a method (embodiment 2). The 50% ethanol solution which is each comparative example was made into the comparative example 1 and the comparative example 2, respectively. As a result, as shown in Table 3, as compared with the comparative example 1 and the comparative example 2, Embodiment 1 and Embodiment 2 showed the outstanding active oxygen generation depressor effect and peroxylipid depressor effect.

[0041]

[Table 3]

	活性酸素生成抑制	過酸化脂質抑制
	IC_{50}(%)	
比較例1	0	—
実施例1	0.0002)	—
比較例2	—	0
実施例2	—	0.004

[0042]The active agent (Polysorbate80) solution which blended the raw material Embodiments 3-4, the comparative example 3 - by a 5 (organoleptics) PIKUNOJIE Norian [Hofer research laboratory company (Switzerland) 2.0% is prepared (embodiment 3), The active agent (Polysorbate80) solution which blended PIKUNOJIE Norian and diisopropylamine dichloro aceti 1.0%, respectively was prepared, respectively (embodiment 4). As the comparative examples 3 and 4, glycerin and the 2.0% combination solution of pyrrolidone-carboxylic-acid NATORIMU were prepared, respectively, and water was made into the comparative example 5.

[0043]

[Table 4]

(試　料)	保湿性試験(%)	官能試験(人)(べたつき感)
実施例3(ピクノジェノール)	183	15
実施例4(ピクノジェノール+DADA)	182	16
比較例3(グリセリン)	142	6
比較例4(ピロリドンカルボン酸ナトリウム)	123	3
比較例5(水)	107	5

[0044]The combination (embodiment 4) of PIKUJIE Norian (embodiment 3) and PIKUNOJIE Norian which are used for this invention as compared with the water of the comparative example 5, and DADA was excellent in moistness and a feeling of stickiness so that clearly from the result of Table 4. On the other hand, glycerin (comparative example 3) and pyrrolidone-carboxylic-acid sodium (comparative example 4) were inferior in moistness and a feeling of stickiness.

[0045]Embodiments 5-9 and comparative example 6 (skin cream)
The powdered ingredient by a PIKUNOJIE Norian [Hofer research laboratory company (Switzerland) was used.
[0046]
Presentation Combination (%)
---------- (A) Self-emulsification type glyceryl monostearate . 3.5 Monostearin acid sorbitan 1.5. (B) Liquid paraffin 25.0 spermaceti wax 5.0 lanolin 5.0 cetanol 2.0 (C) glycerin 3.0 carboxyl vinyl polymer 5.0 Active principle It is written P-oxybenzoic acid ester 0.2 to Table 5. Purified water Residue (D) perfume 0.2[0047]78 ** was used, after dissolving the raw material of the (A) group of the preparing method above at 70 ** and mixing with a raw material (B). Subsequently, in addition, preliminary emulsification was performed gradually, stirring this to the raw material (C) heated at 75 **. It emulsified thoroughly by having applied to the homogenizer after that, (D) was added after cooling at 50 **, and it cooled to 30 **.
[0048]The result of having carried out many examinations of skin cream is shown in Table 5. PIKUNOJIE Norian (embodiments 5, 6, and 7) and PIKUNOJIE Norian, and DADA -- having blended (embodiments 8 and 9) -- as compared with the comparative example 6, the effect outstanding also in the examination [which / of turnover speed, a chapped skin improvement effect, and a keratin improvement effect] was shown.
[0049]
[Table 5]

	ピクノジェノール（配合量%）	DADA（配合量%	ターンオーバー速度（日）	荒れ肌改善効果（人）	角質改善効果（人）
比較例6	—	—	16.3±0.4	4	3
実施例5	0.5	—	15.2±0.7	6	5
実施例6	1	—	14.8±0.5	8	8
実施例7	3	—	14.1±0.2	12	11
実施例8	0.5	0.5	14.4±0.6	10	10
実施例9	1.5	1.5	12.9±0.3	15	15

[0050]Embodiment 10 (face toilet)
[0051]
Presentation % ---------- PIKUNOJIE Norian 2.0 perfume 0.01 glycerin 3.0 disodium hydrogen-phosphate of ethanol 10.0 polyoxyethylene hydrogenated-castor-oil 0.2 paraben 0.1 embodiment 5 description 0.02 potassium-dihydrogen-phosphate 0.08 water It is the whole quantity 100% [0052]Like the presentation shown above, prepare the face toilet of this invention with a conventional method, and Said turnover speed, As a result of carrying out various examinations about a chapped skin improvement effect, a keratin improvement effect, moistness, and functionality, the face toilet (embodiment 10) of this invention is excellent also in respect of any as compared with the face toilet which does not contain an active principle.

It was evaluation that 14 persons have admiration gently among 20 panelists and there is no feeling of stickiness.

[0053]embodiment 11 (milky lotion)
[0054]
Presentation % ---------- PIKUNOJIE Norian 1.0 xanthan-gum 0.11,3-BG 5.0 acyl sodium glutamate given in squalane 5.0 MONOGURI 1.2 behenyl-alcohol 0.5 vaseline 2.0 paraben 0.2 embodiment 5 0.5 water It is the whole quantity 100% [0055] Embodiments 12-16 and the comparative example 7 (tonic)
[0056]
Presentation % ---------- Ethanol 40.0 active-principle table 6 written glycerin 1.0 menthol 0.03 perfume 0.01 isopropylmethyl phenol 0.1 water It is the whole quantity 100% [0057]The tonic of this invention is prepared with a conventional method like the presentation shown above, As a result of carrying out each examination about the above, a mouse hair growth promoting effect, and the Homo sapiens hair hair growth promoting effect (Table 6), the tonic (embodiments 12-16) of this invention was excellent also in respect of any as compared with the tonic (comparative example 7) which does not contain an active principle. It was evaluation as a result of carrying out each examination about moistness and functionality, that 16 persons have admiration gently among 20 panelists and there is no feeling of stickiness.
[0058]
[Table 6]

	ピクノジェノール (配合量%)	DADA (配合量%)	マウス毛 成長促進 効果	ヒト頭髪毛 成長促進 効果
比較例7	—	—	1.04	1.02
実施例12	0.5	—	1.23	1.21
実施例13	1	—	1.32	1.29
実施例14	3	—	1.43	1.41
実施例15	0.5	0.5	1.38	1.37
実施例16	1.5	1.5	1.45	1.44

[0059]Embodiment 17 (shampoo)
[0060]
Presentation % ---------- Palm-oil-fatty-acid diethanolamide 5.0. Polyoxyethylene sodium lauryl sulfate 12.0 polyoxyethylene alkyl sulfo sodium succinate PIKUNOJIE Norian 1.0 [given in 7.0 palm-oil-fatty-acid propyl dimethylamino acetic acid betaine 10.0 embodiment 5] Perfume 0.3 Water It is the whole quantity 100%[0061]Embodiment 18 (baths)
[0062]
Presentation % ---------- PIKUNOJIE Norian 1.0 silicic-acid-

anhydride 1.01 of sodium chloride 10.0 potassium-chloride 6.0 sodium-bicarbonate 35.0 glycerin 0.2 embodiment 5 description, 3-BG 0.001 perfume 0.5 exciccated sodium sulfate It is the whole quantity 100% [0063]The shampoo of this invention of Embodiment 17 is evaluation that hair carries out gently in 11-14 persons as compared with the shampoo which does not contain an active principle among 20 panelists.
The baths of this invention of Embodiment 18 were evaluation that all are excellent in 11-16 persons in a chapped skin improvement effect, a keratin improvement effect, and organoleptics among 20 panelists as compared with the baths which do not contain an active principle and skin carries out gently.

[0064]
[Effect of the Invention]the above -- like a description -- this invention -- a skin aging preventive effect (active oxygen depressor effect.) It excels in peroxylipid depressor effect, a chapped skin improvement effect, a keratin improvement effect, and the effect that makes turnover speed quick, It is clear to provide the new cosmetic which has the outstanding effect which carries out activation of the metabolic turnover of the hair root in the scalp, and promotes growth of a hair root, and was excellent in moistness, and was excellent in the sensory characteristic without stickiness.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

EXAMPLE

[Working example]An embodiment explains this invention still in detail below. Especially the following % displays show weight %, unless it specifies. In advance of an embodiment, the turnover rate measurement method of (1) horny layer, a measurement test method of (2) chapped-skin improvement effect, (3) Explain the measurement test method of a keratin improvement effect, the (4) mouse hair growth promoting effect examining method, the (5) Homo sapiens hair hair growth promoting effect examining method, (6) active-oxygen generation inhibition test, (7) peroxylipid inhibition test, (8) moistness examinations, and (9) organic-functions (feeling of smeariness) examination.
[0026](1) The ointment which blended the dansyl chloride of the turnover rate measurement method fluorochrome of a horny layer 5% into white vaseline was made, blockade spreading was carried out for 24 hours at the skin of a test subject's front arm part, and the horny layer was made to carry out osmosis combination of the dansyl chloride. The bis die (morning, the evening) test sample was applied to the part same after that, the fluorescence of the dansyl chloride was investigated every day, and days until the fluorescence is extinguished were made into the turnover speed of a skin horny layer.
[0027](2) The continuation spreading effect was investigated for four weeks to the measurement test method leg of the chapped skin improvement effect for 20 middle-aged test subjects who have chapped skin. The sample of about 1 g of bis dice was applied to a test subject's left-hand side leg examination part, and the state of the skin before the start of test and after an end was judged by the judging standard of Table 1. The right-hand side leg did not apply a sample, but targeted it.
[0028]
[Table 1]

皮膚乾燥度の判定基準	
−	正常
±	軽微乾燥、薬用なし
＋	乾燥、薬用軽度
＋＋	乾燥、薬用中等度
＋＋＋	乾燥、薬用顕著

[0029]The decided result of the examination part before and behind an examination and a contrast part was compared, and the case where there was "no it is effective" about the case (for example, +->-, ++->**) where two or more steps of the degrees of xerosis cutis have been improved, and there were not "slightly effective" and change about the case where one step has improved was made into "invalidity." The number of the test subject who became "effective" and ["slightly effective"] showed the test result.

[0030](3) Scotchtape (Nichiban mending tape) is pasted up on the examined skin before the start of the chapped skin improvement measurement test of the measurement test method above-mentioned of the keratin improvement (anti-detachability increase of horny cell) effect, and after an end, When this was exfoliated, the state of the horny cell adhering to a tape was investigated in detail with the scanning electron microscope, skin horny layer cell detachability was classified according to the judging standard of Table 2, and the keratin improvement effect was searched for.

[0031]

[Table 2]

角質改善(角質細胞の抗剥離性増大) 効果の判定基準	
評価点1	スケールを認めず
評価点2	小スケール点在
評価点3	小～中スケール顕著
評価点4	大スケール顕著

[0032]The judgment made [the case where the difference of the evaluation items of the examination part after four week continuation spreading and that of a contrast part was on two points] "slightly effective" and the case of zero point "invalidity" for "effective" and the case of one point. The number of the test subject who became "effective" and ["slightly effective"] showed the test result.

[0033](4) the mouse hair growth promoting effect examining method C3 -- after cutting the skin of the center of regions of back of a mouse (the male, 8-week old, and average weight of 35g) with electric hair clipper H system, it depilated thoroughly with the shaver. 0.2 ml per animal of each sample of the embodiment and the comparative example was applied once to the examined skin from the next day every day. The animal used ten groups to one sample. The animal was slaughtered 14 days after the experiment start, and a photograph of an examined skin was taken. Next, a photograph is incorporated into an image analyzing device, the area (A) which carried out hair cutting first, and hair-growing area (B) are determined, and it is mouse hair growth promoting effect =(B)/(A) further.

It computed about each animal.

[0034](5) The hair of the parietal region of ten male test subjects by whom a decline is observed in hair growth of Homo sapiens hair hair growth promoting effect examining method 30-40 generation was shaved to a circle configuration about 7 mm in diameter. Average value (A) was calculated by having asked for the hair growth rate about the hair (about 30-40) of the subject part one day after hair cutting and three days afterward by the method (British journal OBU DERUMATOROJI, 125 volumes, 123 pages, 1991) of woods. Next, about 3 ml of samples of the embodiment or the comparative example were applied twice to each test subject focusing on the examined part every morning and evening every day, and it was made to often massage. It was made Mr. 3rd month of start **** of test, the hair growth rate of the same part was measured, and average value (B) was calculated. The judgment of the effect was performed by comparing ratio [before and behind each hair-growing cosmetic use] (B)/(A).

[0035](6) 2.4 ml of active oxygen generation inhibition test 0.05M sodium carbonate buffer solution (pH 10.2), 0.1 ml of 3mM xanthins, 3mMEDTA0.1ml, 0.1 ml of 0.15% cow serum albumin, During the presentation of 0.1 ml of 0.75mM nitroblue tetrazoliums, 0.1 ml of sample solutions (0.001 to 0.05% of 50% ethanol solution) are added, and are warmed 25 ** for 10 minutes. 0.1 ml of 150 time dilution xanthine oxidase of butter milk origin (made by a sigma company) is added there, and 25 ** reacts for 20 minutes. In addition, a reaction is suspended and 0.1 ml of 6mM copper chlorides measure an absorbance on the wavelength of 560 nm using a spectrophotometer. Instead of the sample solution, the absorbance of what added 0.1 ml of ethanol solutions 50% as contrast was measured. It asked for the control rate (%) to this contrast, and the concentration of control was displayed as IC_{50} (%) 50%.

[0036](7) 0.3 ml of peroxylipid inhibition test methyl linoleate, 1mM hypoxanthine (0.1%TritonX-100), The shaking reaction of 37 ** of the mixed liquor of 0.4 ml of sample solutions (0.01 to 0.1% of 50% ethanol solution), distilled water, and 0.15 ml of 10 time dilution xanthine oxidase of butter milk origin (made by a sigma company) is carried out for 24 hours. Add 0.5 ml of phosphotungstic acid, and 1.0 ml of 0.67% thiobarbituric acid to these 0.3 ml of constituents 10%, and After stirring, For 95-100 ** and 30 minutes, after heating, it quenched, n-butanol was added, centrifugality (3000 rpm, 10 minutes) was performed after shaking stirring, and the absorbance was measured for supernatant liquid on the wavelength of 535 nm using the spectrophotometer. Instead of the sample solution, the absorbance of what added 0.4 ml of ethanol solutions 50% as contrast was measured. It asked for the control rate (%) to this contrast, and the concentration of control was displayed as IC_{50} (%) 50%.

[0037](8) The solution which adjusted moistness test sample concentration to 2.0% was applied to a healthy person's forearm flexor, and the moisture content of 30 minutes after was measured as electric conductivity with the impedance meter. The relative value at the time of

setting spreading before to 100 showed the result.
[0038](9) The organoleptics by the female panelist of 20 organoleptics were carried out, it evaluated whether it would be sticky after the time of cosmetic spreading, and spreading, and admiration would be sensed, and the number of the panelist who answered "Does not feel" showed.
[0039]Embodiments 1-2, the comparative examples 1-3

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

PRIOR ART

[Description of the Prior Art]Generally, the aging skin is the chapped skin which dries and does not have smoothness, and is the skin a horny cell exfoliation phenomenon is accepted to be. And the aging skin has a slow turnover speed, and if antiaging effects carry out a grant manifestation at the skin, it is said that turnover speed becomes quick. Although many skin cosmetics (for example, JP,H7-304639,A, JP,H9-118611,A, JP,H9-176008,A, etc.) are proposed from chapped skin, the viewpoint of aging, etc. until now, it may not yet be satisfied.
[0003]The hair-growing cosmetic which blends the circulation promoting agent, the amino acid which is the nutritional information of hair, and vitamins is known from before. Many medical-application hair tonics which blend an ingredient with the hypertrophy preventive effect of a sebaceous gland and an ingredient with the depressant action of a male sex hormone, and hair-growing cosmetics are also proposed.
[0004]However, a skin stimulus is strong, and the circulation promoting agent currently used conventionally has restriction in the loadings, or there is a fault that the temporal duration of circulation promotion is short.
[0005]By the way, it is guessed that phenomena, such as an activity fall of the defect of circulation or hair mother cells, hypertrophy of a sebaceous gland, and fibrosis of the scalp, became entangled intricately, and have produced male pattern hair loss although the superfluous operation of a male sex hormone is called one of the causes.
[0006]However, the actual condition is not resulting, by the time it reveals a hair restoring effect even if it only uses an antiandrogen agent etc. as a hair restorer, in order that a superfluous operation of a male sex hormone may control the activity fall of hair mother cells and the hypertrophy of a sebaceous gland which are called cause. Good results are not acquired even if it uses a hair-mother-cells activator and a circulation accelerator.
[0007]Although many hair growing and hair restorers (for example, JP,H5-58850,A, JP,H5-139936,A, JP,H5-170625,A, etc.) are proposed as a means to solve the aforementioned

problem, The actual condition is that will not result by the time it acquires the effect which should promote a peripheral blood style, cannot be found out about a marked hair restoring effect even if it uses the substance which activates hair mother cells, and should be enough satisfied also in a constituent, but a hair restoration effect and a depilation preventive effect have room of improvement.

[0008]On the other hand, the moisturizer is blended with cosmetics for the purpose, such as protecting skin from constant maintenance of the skin, or desiccation of a winter season. The water-soluble polyhydric alcohol represented by glycerin, propylene glycol, and sorbitol as a moisturizer used conventionally, The natural moisturizing factor represented by the water soluble polymer, pyrrolidone-carboxylic-acid salt, and amino acid which are represented by hyaluronic acid and xanthan gum, the intercellular lipid represented by ceramide, etc. are mentioned.

[0009]Although the cosmetic which blended the conventional moisturizer has a fixed effect, water-soluble polyhydric alcohol and the water soluble polymer should have many which are sticky immediately after the time of spreading, and spreading, and have admiration, and should not necessarily be satisfied on a sensory characteristic, and the cosmetic which has improved this is called for.

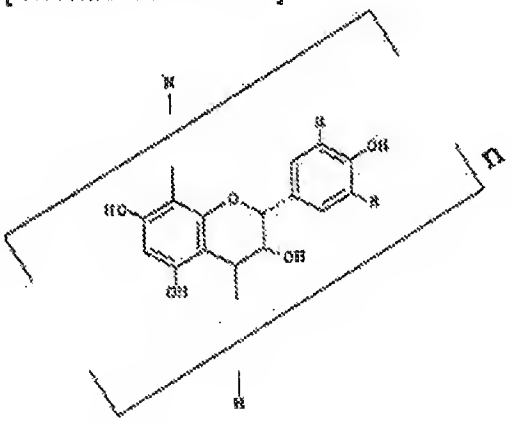
[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1]A cosmetic containing the Matsuki hide origin ingredient which uses a pro anthocyanidin of a following general formula as the main ingredients.
[Chemical formula 1]



(However, as for n, the number of 1-1000 and R show a hydrogen atom or a hydroxyl group in a formula.)
[Claim 2]A cosmetic containing the Matsuki hide origin ingredient which uses a pro anthocyanidin as the main ingredients, and diisopropylamine dichloro acetate.

[Translation done.]